

Notice of Allowability

Application No.

10/665,757

Examiner

Pamela E. Perkins

Applicant(s)

LEEDY, GLENN J.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the filing of the Terminal Disclaimer on 11 January 2006.
2. ☒ The allowed claim(s) is/are 156-291,394-399,409-424,448-455,457-460,462-464,466-468,470-485 and 523-530.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 10/28/05 1/11/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

DETAILED ACTION

This office action is in response to the filing of the Terminal Disclaimer on 11 January 2006. Claims 156-291, 394-299, 409-424, 448-455, 457,460, 462-464, 466-468, 470-485 and 523-530 are pending; claims 1-55, 292-393, 400-408, 425,447, 456, 461, 465, 469 and 486-522 have been cancelled.

Allowable Subject Matter

Claims 156-291, 394-299, 409-424, 448-455, 457,460, 462-464, 466-468, 470-485 and 523-530 are allowed.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: referring to claims 156, 169, 179, 220, 234, 245, prior art does not anticipate, teach, or suggest a method of making an integrated circuit where a substrate has a principal surface; forming circuit devices on the principal surface; and forming a stress-controlled dielectric membrane/layer overlying the circuit devices.

Referring to claims 189 and 198, prior art does not anticipate, teach, or suggest a method of using an integrated circuit having a stress-controlled dielectric layer and interconnections formed passing through the stress-controlled dielectric layer wherein formation is transferred through the interconnection formed passing through the stress-controlled dielectric layer.

For example, Mauger (4,966,663) discloses a method of making an integrated circuit where a substrate has a principal surface; forming circuit

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devices/circuitry/active devices on the principal surface; and forming an elastic low stress/stress-controlled membrane/layer overlying the circuit devices.

Mauger '663 further discloses the integrated circuit able to have a major portion of the substrate removed throughout a full extent thereof while retaining its structural integrity. However, Mauger '663 does not disclose, anticipate, teach, or suggest the stress-controlled membrane/layer as a dielectric layer.

Stein (4,070,230) discloses a method of making an integrated circuit where a substrate has a principal surface; forming circuit devices/circuitry/active devices on the principal surface; and forming a layer overlying the circuit devices. Stein further discloses the integrated circuit able to have a major portion of the substrate removed throughout a full extent thereof while retaining its structural integrity. Stein also discloses transferring information through interconnections formed passing through the layer, wherein the interconnections are at least one of electrical and optical interconnections. However, Stein does not disclose, anticipate, teach or suggest the layer as a stress-controlled dielectric membrane/layer.

The prior art made of record in this action does not anticipate, teach, or suggest forming a stress-controlled dielectric membrane/layer overlying the circuit devices.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela E. Perkins whose telephone number is (571) 272-1840. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Zandra V. Smith
Supervisory Patent Examiner

5 Feb 2006

PEP